

Remarks

Claims 1, 3, 4, and 7-21 are presently active, claims 2, 5, and 6 having been cancelled by this Amendment without prejudice.

In the Office Action dated 11 February 2003 ("Office Action"), it was indicated that the claims were originally incorrectly numbered; claims 1, 3, and 5 were rejected under 35 U.S.C. §112, second paragraph; claims 1 and 2 were rejected under 35 U.S.C. §102(e) as being anticipated by Horiguchi, et al., U.S. patent 6,339,358 ("Horiguchi"); claim 7 was rejected under 35 U.S.C. §103(a) as being unpatentable over Ciraula, et al., U. S. patent 6,025,741 ("Ciraula"); claims 3-6 and 8-10 were objected to but conditionally allowed if rewritten as suggested in the Office Action; and claims 11-21 were allowed.

Applicants acknowledge with appreciation the allowance of claims 11-21, and the conditional allowance of claims 3-6 and 8-10 if rewritten as suggested in the Office Action. The various issues raised in the Office Action are addressed below.

Incorrect numbering of claims

Because the original set of claims were not correctly numbered (the numeral 4 was skipped by mistake), many of the dependent claims are amended so that they now refer to a correctly numbered claim.

35 U.S.C. §112, second paragraph rejection of claims 1, 3, and 5

Claims 1 and 3 no longer explicitly recite the "stack effect", and claim 5 is cancelled without prejudice.

Claim 1 is amended to recite that the drain of the foot transistor is connected to the source of each read-pass transistor. Claim 1 is also amended to include the limitation of claim 2.

Claim 3 is amended to recite a function that the "stack effect" performs. Claim 3 now recites that subthreshold current in the read-access transistor flowing through the foot transistor causes the read-access transistor to be reverse biased if the memory cell stores the first logical state and the read-access transistor and the foot transistor are OFF; and claims 3 further recites that a subthreshold current in the read-pass transistor flowing

through the foot transistor causes the read-pass transistor to be reverse biased if the memory cell stores the second logical state and the foot transistor is OFF. This claim limitation finds support in the specification, paragraphs 24 and 25 on pages 6 and 7. Therefore, no new subject matter has been added.

35 U.S.C. §102(e) rejection of claims 1 and 2 over Horiguchi

Claim 2 is cancelled without prejudice because its limitation is now recited by claim 1.

Claim 1 is amended to better define the invention by removing the reference to a "stack effect" and by reciting that the drain of the foot transistor is connected to the source of each of the read-pass transistors. Claim 1 also better defines a read-pass transistor by reciting that the read-pass transistor's gate is HIGH if its corresponding memory cell stores a first logical state and is LOW if a second logical state is stored.

Applicants believe that claim 1 is clearly distinguished over Horiguchi. Nowhere does Horiguchi teach a read-access transistor as recited in claim 1.

35 U.S.C. §103(a) rejection of claim 7 over Ciraula.

In the Office Action, page 4, transistor 88 in Fig. 5 of Ciraula was identified as a foot transistor. Applicants respectfully disagree that transistor 88 can be identified as a foot transistor as recited in claim 7. Note that the gates of transistors 88 in Fig. 5 of Ciraula are connected to the bitlines. Therefore, transistors 88 will be ON as long as the bitlines are HIGH. When no memory operation is being performed on an array of memory cells connected to a bitline, then that bitline remains HIGH. Therefore, transistors 88 will be ON when no memory operation is being performed. But claim 7 recites that the foot transistor is OFF when no memory operation is being performed on the memory cells. Therefore, Applicants believe that Ciraula is inapplicable to claim 7, and that claim 7 is patentable over Ciraula.

Objections to claims 3-6 and 8-10

Claim 3 is amended to be in independent form, and therefore claims 3 and 4 are believed to be allowable. (Claims 5 and 6 are cancelled without prejudice.)

Claims 8-10 are believed allowable because claim 7 upon which they depend is believed allowable, as discussed above.

Respectfully submitted,

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